

IN THE CLAIMS

1. (Cancelled)
2. (Cancelled)
3. (Previously Presented) A method according to claim 9, wherein step (f) includes repeatedly sending the subsequent messages at a time interval less than the time out period.
4. (Cancelled)
5. (Cancelled)
6. (Previously Presented) An enhanced Internet telephony system according to claim 16, wherein the destination comprises a server coupled to send at least one of the subsequent messages within the time out period.
7. (Original) An enhanced Internet telephony system according to claim 6, wherein the source comprises a media terminal adapter.
8. (Previously Presented) A method of providing enhanced Internet telephony according to claim 9, wherein the intermediate point is a router.

9. (Previously Presented) A method of providing enhanced Internet telephony comprising steps of:

(a) receiving a message from a source at an intermediate point between the source and a destination, said intermediate point including at least one port having a time out period within which the destination may send messages to the source via the intermediate point;

(b) sending at least a portion of the message from the intermediate point to the destination over the Internet;

(c) sending a response to the message from the destination to the intermediate point over the Internet within the time out period;

(d) sending the response from the intermediate point to the source;

(e) sending a reply to the response from the source to the intermediate point;

(f) preventing the port from timing out by repeatedly sending subsequent messages from the destination over the Internet to the intermediate point;

(g) sending at least a portion of corresponding ones of the subsequent messages from the intermediate point to the source; and

(h) sending replies to the portion of the subsequent messages from the source to the intermediate point, wherein the current time out period restarts upon arrival at the intermediate point of a message from the destination.

10. (Previously Presented) A method of providing enhanced Internet telephony comprising steps of:

(a) receiving a message from a source at an intermediate point between the source and a destination, said intermediate point including at least one port having a time out period within which the destination may send messages to the source via the intermediate point;

(b) sending at least a portion of the message from the intermediate point to the destination over the Internet;

(c) sending a response to the message from the destination to the intermediate point over the Internet within the time out period;

(d) sending the response from the intermediate point to the source;

(e) sending a reply to the response from the source to the intermediate point;

(f) preventing the port from timing out by repeatedly sending subsequent messages from the destination over the Internet to the intermediate point;

(g) sending at least a portion of corresponding ones of the subsequent messages from the intermediate point to the source; and

(h) sending replies to the portion of the subsequent messages from the source to the intermediate point, wherein the current time out period restarts upon arrival at the intermediate point of a reply from the source.

11. (Previously Presented) A method of providing enhanced Internet telephony according to claim 9, wherein the intermediate point assigns a new network address to the at least one port at the end of the time out period.

12. (Previously Presented) A method of providing enhanced Internet telephony according to claim 11, wherein the intermediate point assigns the new network address according to Dynamic Host Computer Protocol.

13. (Previously Presented) A method of providing enhanced Internet telephony according to claim 9, wherein the messages are telephony signaling messages.

14. (Previously Presented) A method of providing enhanced Internet telephony according to claim 13, wherein the signaling messages are session initiation protocol (SIP) messages.

15. (Previously Presented) An enhanced Internet telephony system according to claim 16, wherein the intermediate point is a router.

16. (Previously Presented) An enhanced Internet telephony system comprising:
a message source;

an intermediate point between the message source and a destination, including at least one port having a time out period within which the destination may send messages to the source via the intermediate point, said intermediate point being coupled to receive a message from the source and to send at least a portion of the message to the Internet;

the destination coupled to receive the message from the intermediate point, to send a response to the message to the intermediate point over the Internet within the time out

period, and to prevent the port from timing out by repeatedly sending subsequent messages over the Internet to the intermediate point;

wherein the message source is coupled to the intermediate point so as to send replies to the response message and the subsequent messages and wherein the current time out period restarts upon arrival at the intermediate point of a message from the destination.

17. (Previously Presented) An enhanced Internet telephony system comprising:

a message source;

an intermediate point between the message source and a destination, including at least one port having a time out period within which the destination may send messages to the source via the intermediate point, said intermediate point being coupled to receive a message from the source and to send at least a portion of the message to the Internet;

the destination coupled to receive the message from the intermediate point, to send a response to the message to the intermediate point over the Internet within the time out period, and to prevent the port from timing out by repeatedly sending subsequent messages over the Internet to the intermediate point;

wherein the message source is coupled to the intermediate point so as to send replies to the response message and the subsequent messages and wherein the current time out period restarts upon arrival at the intermediate point of a reply from the message source.

18. (Previously Presented) An enhanced Internet telephony system according to claim 16, wherein the intermediate point assigns a new network address to the at least one port at the end of the time out period.

19. (Previously Presented) An enhanced Internet telephony system according to claim 18, wherein the intermediate point assigns the new network address according to Dynamic Host Computer Protocol.

20. (Previously Presented) An enhanced Internet telephony system according to claim 16, wherein the messages are telephony signaling messages.

21. (Previously Presented) An enhanced Internet telephony system according to claim 20, wherein the signaling messages are session initiation protocol (SIP) messages.

22. (Cancelled)

23. (Previously Presented) An Internet telephony system according to claim 24, wherein the intermediate point is a router.

24. (Previously Presented) In an Internet telephony system comprising:

a message source adapted to generate and receive call setup messages in a signaling packet protocol and to generate and receive communication packet streams in a packet stream protocol,

an intermediate point coupled between the message source and a network, said intermediate unit including at least one port having a time out condition, and

a signaling destination coupled to the network and adapted to generate and receive signaling messages according to the signaling packet protocol;

the improvement wherein the signaling destination prevents the port from meeting the time out condition during a user telephony communication by repeatedly requesting signaling message replies from the message source via the intermediate point and wherein the current time out condition resets upon arrival at the intermediate point of the request for a signaling message reply from the signaling destination.

25. (Previously Presented) In an Internet telephony system comprising:

a message source adapted to generate and receive call setup messages in a signaling packet protocol and to generate and receive communication packet streams in a packet stream protocol,

an intermediate point coupled between the message source and a network, said intermediate unit including at least one port having a time out condition, and

a signaling destination coupled to the network and adapted to generate and receive signaling messages according to the signaling packet protocol;

the improvement wherein the signaling destination prevents the port from meeting the time out condition during a user telephony communication by repeatedly requesting signaling message replies from the message source via the intermediate point and the current time out condition resets upon arrival at the intermediate point of a signaling message from the message source.

26. (Previously Presented) An Internet telephony system according to claim 24, wherein the intermediate point assigns a new network address to the at least one port when the time out condition is met.

27. (Previously Presented) An Internet telephony system according to claim 26, wherein the intermediate point assigns the new network address according to Dynamic Host Computer Protocol.

28. (Previously Presented) An Internet telephony system according to claim 24, wherein the signaling messages are session initiation protocol (SIP) messages.

29. (Previously Presented) An Internet telephony system according to claim 24, wherein the repeatedly sent messages are sent according to a timer.

30. (Previously Presented) An Internet telephony system according to claim 24, wherein the intermediate point releases a network address from said at least one port when the time out condition is met.

31. (Previously Presented) A method of providing enhanced Internet telephony according to claim 9, wherein the repeatedly sent messages are sent according to a timer.

32. (Previously Presented) A method of providing enhanced Internet telephony according to claim 9, wherein the intermediate point releases a network address from said at least one port at the end of the time out period.

33. (Previously Presented) A method according to claim 10, wherein step (f) includes repeatedly sending the subsequent messages at a time interval less than the time out period.

34. (Previously Presented) A method of providing enhanced Internet telephony according to claim 10, wherein the intermediate point is a router.

35. (Previously Presented) A method of providing enhanced Internet telephony according to claim 10, wherein the intermediate point assigns a new network address to the at least one port at the end of the time out period.

36. (Previously Presented) A method of providing enhanced Internet telephony according to claim 35, wherein the intermediate point assigns the new network address according to Dynamic Host Computer Protocol.

37. (Previously Presented) A method of providing enhanced Internet telephony according to claim 10, wherein the messages are telephony signaling messages.

38. (Previously Presented) A method of providing enhanced Internet telephony according to claim 37, wherein the signaling messages are session initiation protocol (SIP) messages.

39. (Previously Presented) A method of providing enhanced Internet telephony according to claim 10, wherein the repeatedly sent messages are sent according to a timer.

40. (Previously Presented) A method of providing enhanced Internet telephony according to claim 10, wherein the intermediate point releases a network address from said at least one port at the end of the time out period.

41. (Previously Presented) An enhanced Internet telephony system according to claim 16, wherein the repeatedly sent messages are sent according to a timer.
42. (Previously Presented) An enhanced Internet telephony system according to claim 16, wherein the intermediate point releases a network address from said at least one port at the end of the time out period.
43. (Previously Presented) An enhanced Internet telephony system according to claim 17, wherein the destination comprises a server coupled to send at least one of the subsequent messages within the time out period.
44. (Previously Presented) An enhanced Internet telephony system according to claim 43, wherein the source comprises a media terminal adapter.
45. (Previously Presented) An enhanced Internet telephony system according to claim 17, wherein the intermediate point is a router.
46. (Previously Presented) An enhanced Internet telephony system according to claim 17, wherein the intermediate point assigns a new network address to the at least one port at the end of the time out period.

47. (Previously Presented) An enhanced Internet telephony system according to claim 46, wherein the intermediate point assigns the new network address according to Dynamic Host Computer Protocol.

48. (Previously Presented) An enhanced Internet telephony system according to claim 17, wherein the messages are telephony signaling messages.

49. (Previously Presented) An enhanced Internet telephony system according to claim 48, wherein the signaling messages are session initiation protocol (SIP) messages.

50. (Previously Presented) An enhance Internet telephony system according to claim 17, wherein the repeatedly sent messages are sent according to a timer.

51. (Previously Presented) An enhanced Internet telephony system according to claim 17, wherein the intermediate point releases a network address from said at least one port at the end of the time out period.

52. (Previously Presented) An Internet telephony system according to claim 25, wherein the intermediate point is a router.

53. (Previously Presented) An Internet telephony system according to claim 25, wherein the intermediate point assigns a new network address to the at least one port when the time out condition is met.

54. (Previously Presented) An Internet telephony system according to claim 53, wherein the intermediate point assigns the new network address according to Dynamic Host Computer Protocol.

55. (Previously Presented) An Internet telephony system according to claim 25, wherein the signaling messages are session initiation protocol (SIP) messages.

56. (Previously Presented) An Internet telephony system according to claim 25, wherein the repeatedly sent messages are sent according to a timer.

57. (Previously Presented) An Internet telephony system according to claim 25, wherein the intermediate point releases a network address from said at least one port when the time out condition is met.